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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,637	05/02/2001	Yaakov Naparstek	13125-002001 / 6433/US/99	6610
26161	7590 07/31/2002			
FISH & RICI	HARDSON PC		EXAMINER	
225 FRANKLI BOSTON, MA			ROARK, JI	ESSICA H
			ART UNIT	PAPER NUMBER
			1644	13
			DATE MAILED: 07/31/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Applicati n No.	Applicant(s	;)			
	09/847,637	NAPARSTE	K ET AL.			
Office Action Summary	Examiner	Art Unit				
	Jessica H. Roark	1644				
The MAILING DATE f this communication appears n the cover sheet with the corresp ndence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status						
1) Responsive to communication(s) filed on 06 A	August 2001 and 0	7 February 2002 .				
2a)  This action is <b>FINAL</b> . 2b)  Th	is action is non-fin	al.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-23 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) <u>1-23</u> are subject to restriction and/or e	election requireme	ent.				
Application Papers	_					
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on <u>02 May 2001</u> is/are: a) □ accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.  If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) The translation of the foreign language provisional application has been received.						
15)⊠ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)  1) Notice of References Cited (PTO-892)	4) 🗍	Interview Summary (PTO-413) Pa	aner No(s)			
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449) Paper No(s) _</li> </ol>	5) 🔲	Notice of Informal Patent Applicat				

Art Unit: 1644

#### **DETAILED ACTION**

1. Applicant's Preliminary Amendment, filed 8/6/01, is acknowledged. Claims 1-23 are pending.

# Sequence Compliance

2. The instant application appears to be in sequence compliance for patent applications containing nucleotide sequence and/or amino acid sequence disclosures.

## **Drawing Requirement**

3. Formal drawings have been submitted which fail to comply with 37 CFR 1.84. Please see the enclosed form PTO-948.

### INFORMATION ON HOW TO EFFECT DRAWING CHANGES

#### A. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

B. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, MUST be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings MUST be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

#### **Timing of Corrections**

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.185(a). Failure to take corrective action within the set (or extended) period will result in ABANDONMENT of the application.

Art Unit: 1644

## Restriction Requirement

- 4. Restriction to one of the following inventions is required under 35 U.S.C. § 121:
  - I. Claims 1-3, 5-7, 13 and 15-16, drawn to a B cell epitope peptide of HSP 65 and vaccines comprising; classified in Class 530, subclasses 300 and Class 424, subclass 278.1.
  - II. Claim 4, drawn to a B cell epitope peptide of HSP 60; classified in Class 530, subclass 300.
  - III. Claims 8-9, 11-12 and 14, drawn to a nucleic acid or DNA sequence encoding a B cell epitope of HSP 65 and vaccines comprising, classified in Class 536, subclass 23.7 and Class 514, subclass 44.
  - IV. Claim 10, drawn to a DNA sequence comprising SEQ ID NO:5, derived from human HSP 60, classified in Class 536, subclass 23.5.
  - V. Claims 17-19 and 21-22, drawn to an antibody to a B cell epitope of HSP 65 and compositions comprising; classified in Class 530, subclass 388.4 and Class 424, subclass 150.1.
  - VI. Claim 20, drawn to an antibody to a B cell epitope of HSP 60; classified in Class 530, subclass 388.2.
  - VII. Claim 23, drawn to a method of predicting the susceptibility/predisposition of an individual to arthritis by detecting antibody, classified in Class 435, subclass 7.1.

The Inventions are distinct, each from the other because:

- 5. Groups I-VI are different products. Nucleic acids, peptides, and antibodies to the peptides differ with respect to their structures and physicochemical properties; therefore each product is patentably distinct. In addition, each of the nucleic acid and amino acid composition of HSP 60 and HSP 65 are structurally distinct; thus the nucleic acids, peptides and antibodies to the peptide derived from these different sources are also structurally distinct.
- 6. Groups (III and I) and (IV and II) are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product, the peptides can be made using an amino acid synthesizer.
- 7. Group VII and V/VI are related as product and process of using. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the antibodies of Groups V/VI can be used for affinity purification, in addition to the method recited.

Art Unit: 1644

8. These inventions are distinct for the reasons given above. In addition, they have acquired a separate status in the art as shown by different classification and/or recognized divergent subject matter. Further, even though in some cases the classification is shared, a different field of search would be required based upon the structurally distinct products recited, in particular as noted with respect to HSP 60 and HSP 65. Moreover, a prior art search also requires a literature search, which would not be completely co-extensive. It is an undue burden for the examiner to search more than one invention. Therefore restriction for examination purposes as indicated is proper.

# Species Election

- 9. This application contains claims directed to the following patentably distinct species of the claimed Inventions I: wherein the B cell epitope peptide of HSP 65 is:
  - A) SEQ ID NO:1,
  - B) SEQ ID NO:2, or
  - C) SEQ ID NO:3.

These species are distinct because each peptides structure differs; thus each peptide represents patentably distinct subject matter.

Applicant is required under 35 U.S.C. § 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

- 10. This application contains claims directed to the following patentably distinct species of the claimed Inventions III: wherein the DNA sequence encodes a B cell epitope peptide of HSP 65 that is:
  - A) SEQ ID NO:1,
  - B) SEQ ID NO:2, or
  - C) SEQ ID NO:3.

These species are distinct because the DNA encoding each peptide differs in structure; thus each DNA represents patentably distinct subject matter.

Applicant is required under 35 U.S.C. § 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

Art Unit: 1644

- 11. This application contains claims directed to the following patentably distinct species of the claimed Inventions V: wherein the antibody is directed against a B cell epitope peptide of HSP 65 that is:
  - A) SEQ ID NO:1,
  - B) SEQ ID NO:2, or
  - C) SEQ ID NO:3.

These species are distinct because each peptide differs in structure and in turn an antibody to each peptide differs in structure; thus each antibody represents patentably distinct subject matter.

Applicant is required under 35 U.S.C. § 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

12. Applicant is advised that a response to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. § 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. M.P.E.P. § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. § 103 of the other invention.

- 13. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.
- 14. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Art Unit: 1644

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica Roark whose telephone number is (703) 605-1209. The examiner can normally be reached Monday through Friday from 8:00 AM to 4:30 PM. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (703) 308-3973. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1600 receptionist whose telephone number is (703) 308-0196.

Papers related to this application may be submitted to Technology Center 1600 by facsimile transmission. Papers should be faxed to Technology Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center telephone number is (703) 305-3014.

Jessica Roark, Ph.D. Patent Examiner Technology Center 1600 July 22, 2002

> PHUMY AMOST PHILLIP GAMBEL, PH.D PRIMARY EXAMINER 7504 CONTOUL 600

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